

Sampling Matrix  
500 Flatbush Avenue  
Hartford, Connecticut

1	CBS Building	The Crusher, Briquetting, and Separator (CBS) Building was used for non-ferrous scrap metal processing. Operations in the building included crushing, briquetting (pressure forming), and magnetic separation. According to Danny Corp., no PCB operations were conducted in this portion of the property. The yard to the east of the CBS building was used for metals container storage (gravel). The yard to the north of the building was used for bulk scrap storage on the asphalt surface. This area was bermed and equipped with a sump for stormwater collection and discharge to the drainage swale. Three ASTs existed in a secondary containment structure to the east of the	1. Five soil borings will be advanced in the outdoor storage areas to 15 fbg. Samples will be collected from 0-1, 2-3, 4-5, 6-7, 8-9, 10-11, 12-13, and 14-15 foot depth intervals and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C). 2. Two concrete chip samples will be collected from stained concrete areas from 0-0.5 inches.
2	South Drainage Yard	The south drainage yard was mostly undeveloped and used for drainage. Some trailer storage occurred in this area. The area is covered with gravel, brush, and a retention pond that was used to collect and infiltrate stormwater.	1. Two soil borings will be advanced to 15 fbg in this area. Samples will be collected collected from 0-1, 2-3, 4-5, 6-7, 8-9, 10-11, 12-13, and 14-15 foot depth intervals and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C). 2. One sediment sample will be collected from the drainage basin and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C).
3	Aerospace Parts Security (APS) Building and Yard	The APS Building was most recently used for processing and destroying aerospace parts to prevent resale on the black market. Operations included drilling, defacing, marking, and rendering parts unusable. Prior to 1990, the APS Building was known as the Heat building, and used for burning wire insulation and other organic materials off of scrap, dismantling transformer carcasses, and other scrap processing. Transformer carcasses and other metal products were stored in the paved and unpaved yards to the east and south of the building. This area was the subject of the 1985 PCB remediation project. Stantec found residual PCBs > 10 ppm in this area in 2012. The floor of the building is impacted with PCBs > 1 ppm and has been characterized.	No soil sampling is proposed in this area under this scope of work because PCBs are known to exist > 10 ppm. The 1985 remediation project used a clean-up goal of 35 ppm PCBs. As such, PCBs may exist at elevated concentrations. Concrete in the APS Building contains elevated concentrations of PCBs. As such, no additional concrete sampling will be conducted.
4	Container Storage Area	The CSA Area is located west of the APS Building and Main Building (Aerospace Building). This area was used for storing containers of non-ferrous alloy and high temperature alloy for processing in the Aerospace Building. According to Danny Corp., these materials were primarily dry bulk scrap. Most metals were stored in covered bin areas, and within two bermed and sheltered processing areas.	1. Six soil borings will be advanced in the area to 15 fbg. Samples will be collected from 0-1, 2-3, 4-5, 6-7, 8-9, 10-11, 12-13, and 14-15 foot depth intervals and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C). 2. Three additional soil borings will be advanced in this area to evaluate soils for road construction. The road construction borings are described in Item 9 (below).
5	Main Building (Aerospace Building)	The Aerospace Building was constructed in the 1950s and used for ferrous and non-ferrous metals processing until 1980, and high temperature alloy processing only from 1980 to 2012. Operations including chip processing using a series of chip processors, baling metals into bales, crushing using two crushers, storage, and processing, and wastewater treatment using the Abcor system (1975 to 2011). AOCs in and around the Main Building include two crusher pits, two baler pits, the Abcor area, chip processing areas, and the aluminum dock and sorting tunnel where aluminum scrap was blown into rail cars using a rotary screw conveyor system.	1. Ten soil borings will be advanced to 15 fbg near the crusher pits (3 borings), baler pits (2 borings), outside and down-gradient of the crusher pits (4 borings), and outside and down-gradient of the baler pits (1 boring). Samples will be collected from 0-1, 2-3, 4-5, 6-7, 8-9, 10-11, 12-13, and 14-15 foot depth intervals and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C). 2. Eight concrete chip samples will be collected from stained concrete areas (0-0.5 inches) in a grid and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C).
6	Overhead Crane Area	The Overhead Crane was used for transporting and loading heavy scrap including transformer cores into rail cars. The area includes the crane superstructure, the concrete runway, a shear and loading platform, and unpaved areas adjacent to the crane and runway. PCBs >10 ppm were detected in surficial soils by Weston in 2007. Paint on the crane was found to contain PCBs > 10 ug/m3 in 2012, but PCBs were not detected in wipe samples collected from the crane. PCBs in paint are not likely to be related to site operations. Minor staining was observed on the runway surface. The runway concrete is in good condition.	1. Nine soil borings will be advanced to 15 fbg near the crane/runway and adjacent unpaved areas. Samples will be collected from 0-0.1, 0.1-0.2, 0.2-0.3. 0.5-1, 2-3, 4-5, 6-7, 8-9, 10-11, 12-13, and 14-15 foot depth intervals and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C). 2. Four concrete chip samples will be collected from stained concrete areas (0-0.5 inches) in a grid and analyzed for PCBs by EPA 8082 (Soxhlet 3540C).
7	Shredder Area	The Shredder Area was used for shredding white goods, storing scrap steel and shredder goods, loading, and processing shredder materials, and managing materials in "dirt-walled tanks". The dirt walled tanks were steel underground storage tanks (USTs) that were used for liquid storage off-site, cut in half, sent to the site for recycling, and used before the steel was recycled to form scrap metal bins near the shredder. Approximately 150 of the "tank halves" were filled with soil from the shredder area and used to form bins. The tanks were never buried at the site. PCBs detected in soils within the "tanks were the result of using fluff contaminated soils as	1. Five soil borings will be advanced to 15 fbg near the shredder and dirt walled tank areas. Samples will be collected from 0-0.1, 0.1-0.2, 0.2-0.3. 0.5-1, 2-3, 4-5, 6-7, 8-9, 10-11, 12-13, and 14-15 foot depth intervals and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C). 2. One concrete chip sample will be collected from the base of the fluff bin from 0-0.5 inches and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C).
8	E Building	The E Building (former Emhart Building) was used in the 1940s and 1950s for glass products manufacturing. In the 1960s, the E Building was used by Suisman & Blumenthal, and then Metals Management, Inc. for Chip Processing, solid alloy processing (dry), and ferrous metals processing until the 1970s, and then high temperature titanium processing from the 1970s to 2012. According to Danny Corp., the E Building was only used for dry solids storage and processing. Operations included shot blasting, inspection, shearing, and chip processing (until mid-1970s).	1. Two soil borings will be advanced to 15 fbg near the E Building. Samples will be collected from 0-0.1, 0.1-0.2, 0.2-0.3, 0.5-1, 2-3, 4-5, 6-7, 8-9, 10-11, 12-13, and 14-15 foot depth intervals and analyzed for PCBs by EPA Method 8082(Soxhlet 3540C). 2. Five concrete/wood floor chip sample will be collected from stained floor areas of the E Building (0-0.5 inches) and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C).
9	Roadway	The City of Hartford is planning the construction of a roadway that connects Bartholomew Avenue with the new Flatbush Avenue off ramp. The proposed roadway is approximately 0.5-miles long and runs from Bartholomew Avenue Extension south to the former APS Building Area. The depth of roadway disturbance is not known. Similarly, the horizontal extent of soil disturbance is not yet known.	1. Eight soil borings will be advanced to 5 fbg in this area. Samples will be collected from 0-1, 1-2, 2-3, 3-4, 4-5 foot depth intervals and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C).
10	Drainage System	The site has been served by a drainage system. The drainage system has historically been configured with 7 "outfalls" as illustrated on the attached plan. The "outfalls" discharge through culverts to the South Branch of the Park River or to Kane Brook, which then discharges to the South Branch of the Park River. The two interceptor trenches, installed in 1990 to intercept petroleum impacted with PCBs, discharge to the drainage system. Some sampling has been conducted in the past.	1. Nine sediment samples will be collected from the drainage swale system. One sample will be collected near each outfall (0-3 inches) and analyzed for PCBs by EPA Method 8082 (Soxhlet 3540C).

Lab (478 samples @ 65.10/sample)	31,118
Lab Digestion Charge for SPLP	650
Driller	13,000
Field Labor/Expenses	13,000
Data Analysis/Validation	3,500
Report	5,000
LEP	2,500
TOTAL	68,768